THE ECONOMIC AND BUDGET OUTLOOK:

AN UPDATE

The Congress of the United States
Congressional Budget Office

NOTES

Unless otherwise indicated, all years referred to in this report are calendar years.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force.

Details in the text and tables of this report may not add to totals because of rounding.

Figures showing periods of recession (indicated by a shaded area) reflect the peak (P) and trough (T) of the recession.

The Balanced Budget and Emergency Deficit Control Act of 1985 (popularly known as Gramm-Rudman-Hollings) is also referred to in this volume more briefly as the Balanced Budget Act.

PREFACE

This volume is one of a series of reports on the state of the economy and the budget issued periodically by the Congressional Budget Office (CBO). Chapter III constitutes the report required by Section 2905(a) of the Deficit Reduction Act of 1984 (Public Law 98-369). In accordance with CBO's mandate to provide objective analysis, the report contains no recommendations.

Chapter I of this report was prepared by the Fiscal Analysis Division under the direction of Jacob S. Dreyer, with the assistance of Robert Dennis, George Iden, and John F. Peterson. Important contributions were made by Trevor Alleyne, Katherine Barnum, James Barth, John Canally, Jr., Suzanne Cooper, Victoria S. Farrell, Douglas R. Hamilton, James Kiefer, Daniel Laufenberg, Frank S. Russek, Jr., John Sabelhaus, Matthew A. Salomon, Scott Schuh, John R. Sturrock, Eng Meng Tan, Stephan S. Thurman, and Bragi Valgeirsson.

The outlay projections were prepared by the staff of the Budget Analysis Division, under the supervision of James L. Blum, C.G. Nuckols, Michael A. Miller, Charles E. Seagrave, Robert A. Sunshine, and Paul N. Van de Water. The revenue estimates were prepared by the staff of the Tax Analysis Division, under the supervision of Rosemary D. Marcuss and Kathleen M. O'Connell, with important contributions by Mark Booth, Rick Kasten, Jeffrey Miller, Marianne Page, Linda Radey, and Frank Sammartino.

Chapter II was written by Kathy A. Ruffing, with contributions by David Bashore, Paul Christy, Carmela Dyer, Andrew Haughwout, Richard Krop, and Mark Weatherly. Chapter III was written by Paul N. Van de Water and Matthew A. Salomon, with the assistance of Suzanne Cooper.

Paul L. Houts supervised the editing and production of this report, assisted by Nancy H. Brooks. Major portions were edited by Francis S. Pierce and Sherry Snyder. Debra M. Blagburn coordinated the preparation of the report. The authors owe special thanks to Linda Brockman, Marion Curry, Bonnie Fowler, Janice Johnson, Thelma L. Jones, Dorothy J. Kornegay, and L. Rae Roy, who typed the many drafts.

Edward M. Gramlich
Acting Director

August 1987

CONTENTS

SUMMARY xi

I THE ECONOMIC OUTLOOK 1

Fiscal Policy *2*
The Dollar, Monetary Policy, and Interest Rates *5*
Labor Markets *10*
Prices and Wages *13*
The Composition of Demand *21*
The Economic Forecast and Medium-Term Projections *33*

II THE BUDGET OUTLOOK 41

The Short-Run Budget Outlook *42*
The Budget Outlook Through 1992 *47*

III UNCERTAINTY AND BIAS IN BUDGET PROJECTIONS 63

Overview *63*
Analysis of Budget Resolution Estimates *66*
Policy Differences *70*
Errors in Economic Assumptions *72*
Errors in Technical Assumptions *79*
Uncertainty in Budget Estimates *85*

APPENDIXES

A Sources for Analyzing Economic and Budget Errors *89*
B Estimates of Potential Output *97*
C Historical Estimates of Potential GNP, NAIRU, and the Standardized-Employment Deficit *101*

TABLES

S-1.	Effect of Tax Reform and One-Time Outlay Savings on the Deficit	xii
S-2.	Changes in Baseline Deficit Projections Since February	xiv
S-3.	Policy Changes in the Fiscal Year 1988 Budget Resolution as Estimated by CBO	xv
S-4.	The CBO Forecast for 1987 and 1988	xvii
S-5.	Comparison of CBO Winter and Summer Economic Projections	xix
I-1.	Measures of Fiscal Policy	3
I-2.	Nominal Wage and Compensation Rates in the Nonfarm Business Sector	19
I-3.	Current Indicators of Business Fixed Investment and Surveys of Capital Spending Plans for 1987	23
I-4.	Housing	28
I-5.	Government Purchases of Goods and Services	30
I-6.	The CBO Forecast for 1987 and 1988	35
I-7.	Medium-Term Economic Projections for Calendar Years 1989-1992	38
I-8.	Medium-Term Economic Projections for Fiscal Years 1989-1992	39
II-1.	The Outlook for Fiscal Years 1987 and 1988	43

II-2.	Differences Among CBO Baseline, Base for Sequestration, and Budget Resolution for Fiscal Year 1988	44
II-3.	CBO Baseline Projections of Revenues, Outlays, and Deficits	47
II-4.	Updated CBO Baseline Projections for Fiscal Years 1987 Through 1992	49
II-5.	Effect of the Tax Reform Act of 1986 on CBO Revenue Projections	50
II-6.	Changes in CBO Baseline Projections Since February 1987	51
II-7.	Effect of Tax Reform and One-Time Outlay Savings on the Deficit	53
II-8.	Policy Changes in the Fiscal Year 1988 Budget Resolution as Estimated by CBO	57
II-9.	Preliminary Reestimates of the Congressional Budget Resolution	58
II-10.	Projections of CBO Baseline Receipts and Expenditures on a National Income and Product Accounts Basis	61
II-11.	Relationship of the CBO Baseline to the Federal Sector of the National Income and Product Accounts	62
III-1	Sources of Differences Between Actual Budget Totals and First Budget Resolution Estimate for Fiscal Years 1980-1987	69
III-2.	Policy Differences Between Actual Budget Totals and First Budget Resolution Estimates for Fiscal Years 1980-1987	71

III-3.	Economic Differences Between Actual Budget Totals and First Budget Resolution Estimates for Fiscal Years 1980-1987	74
III-4.	Equations Relating Economic Differences Between Actual and Estimated Revenues to Differences Between Actual and Assumed Gross National Product	75
III-5.	Budget Year GNP Forecasts and Errors	78
III-6.	Technical Differences Between Actual Budget Totals and First Budget Resolution Estimates for Fiscal Years 1980-1987	81
A-1.	Congressional Budget Resolutions and Actual Budget Totals	90
A-2.	Data Sources for the Institutional Forecast Comparison	92

FIGURES

S-1.	Deficit Adjusted for Tax Reform Act and One-Time Savings	xiii
S-2.	Major Economic Assumptions	xviii
I-1.	Standardized-Employment Deficit	4
I-2.	The Exchange Rate and Relative Interest Rates	7
I-3.	Recent Movements of Short- and Long-Term Interest Rates	8
I-4.	M2 Growth and Targets	9
I-5.	Productivity Growth	12

I-6.	Private Nonfarm Employment	13
I-7.	Measures of Inflation	16
I-8.	Foreign and U.S. Import Prices	17
I-9.	Private Nonfarm Wage Rates	20
I-10.	Business Fixed Investment Indicators	24
I-11.	Capacity Utilization	25
I-12.	Saving and Debt Measures	26
I-13.	Vacancy Rate for Rental Units	29
I-14.	Real Trade Balance	31
III-1.	Sources of Error in Deficit Estimates, Fiscal Years 1980-1987	64
III-2.	Budget Resolution and Actual Deficits	67
III-3.	Farm Price Support Outlays	84
III-4.	Uncertainty of Fiscal Year 1988 GNP Forecast	86
B-1.	The Effect of Demographics on the Unemployment Rate	98
B-2.	Real Gross Domestic Product	99

BOXES

I-1.	Troubled Financial Institutions	11
I-2.	Labor Markets, Inflation, and NAIRU	14
II-1.	The Federal Employees' Thrift Plan and the Budget	54

SUMMARY

Moderate economic growth--spurred mainly by an improvement in foreign trade--is likely to continue, according to the latest Congressional Budget Office (CBO) projections. But the growth rate is slightly lower than previously projected. Also, the outlook now shows higher consumer price inflation and interest rates than were foreseen in the winter. This change in economic assumptions has increased the projected budget deficits for 1988 through 1992.

THE BUDGET SITUATION

While CBO's winter baseline deficit projection declined steadily from $176 billion in 1987 to $84 billion in 1992, the new estimates show a different pattern. Because of unexpectedly strong growth in revenues, the 1987 deficit is now estimated at $157 billion. But the improvement does not persist. The baseline deficit, which assumes a continuation of current budgetary policies, rises to $183 billion in 1988 and $192 billion in 1989 before beginning a slow decline.

This pattern is caused largely by the phase-in of the Tax Reform Act of 1986 and by various one-time outlay reductions, as shown in Summary Table 1 and Summary Figure 1. Tax reform has added about $20 billion to revenues in 1987, but will reduce revenues by $12 billion in 1988 and $18 billion in 1989. Asset sales, loan prepayments, the one-day delay of the military pay date, and other one-time outlay savings reduce the deficit by $15 billion in 1987 but add to the deficit thereafter. Removing these two items yields an adjusted deficit that averages about $170 billion over the next four years. These adjusted deficits decline relative to GNP--from 4.4 percent of GNP in 1987 to 2.5 percent in 1992--but at a slower rate than in the earlier projections.

Summary Table 2 details the changes in the baseline budget projections since CBO's February report. The most significant changes stem from revisions in the economic projections, which are summarized in the next section. Enacted legislation, primarily the supplemental appropriation, has raised 1987 budget authority and outlays. Because the baseline assumes that appropriations are held constant in real terms, the supplemental appropriation is projected to increase spending in later years as well. Technical reestimates resulting primarily from new data on taxable incomes have raised revenues, while reestimates for farm price supports, deposit insurance, and Social Security benefits have reduced outlays. The new estimates do not include the new thrift savings fund for federal employees in the budget totals, following the recent General Accounting Office opinion about its proper budgetary treatment. As a result, the thrift fund's receipt of voluntary employee contributions is no longer treated as reducing the deficit, and agency contributions add to the deficit.

SUMMARY TABLE 1. EFFECT OF TAX REFORM AND ONE-TIME OUTLAY SAVINGS ON THE DEFICIT (By fiscal year)

	1987	1988	1989	1990	1991	1992
			In Billions of Dollars			
Baseline Deficit	157	183	192	176	165	151
Adjustment for:						
Tax reform	20	-12	-18	-5	2	4
One-time outlay savings a/	15	-2	-2	-1	-1	-1
Total adjustments	35	-14	-20	-6	1	3
Adjusted Deficit	192	169	172	170	166	154
			As a Percent of GNP			
Baseline Deficit	3.6	3.9	3.8	3.3	2.9	2.5
Adjusted Deficit	4.4	3.6	3.4	3.2	2.9	2.5

SOURCE: Congressional Budget Office.

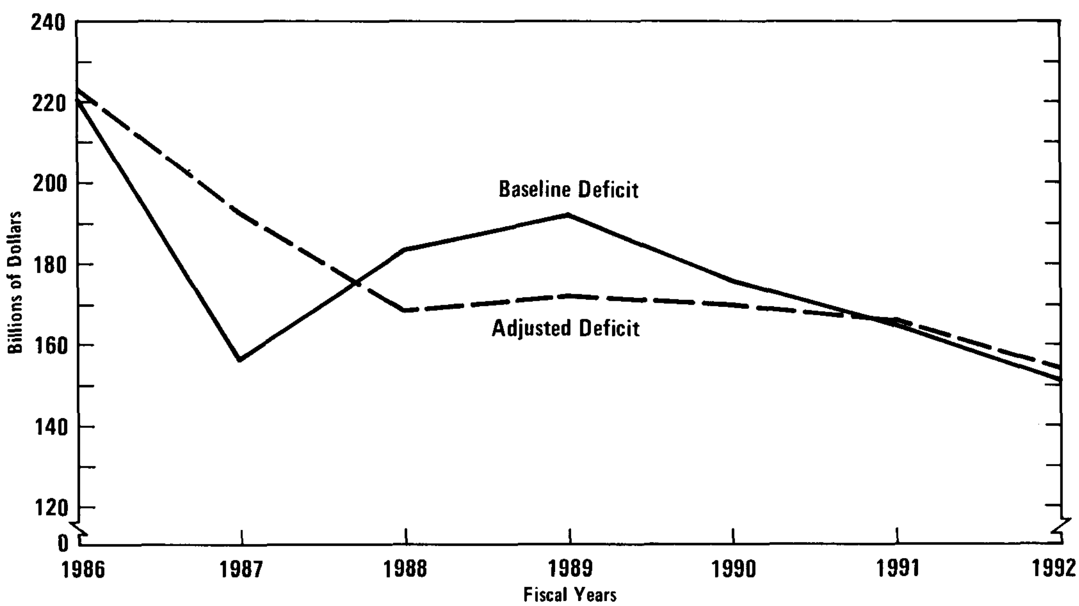
a. Includes asset sales, loan prepayments, Outer Continental Shelf escrow releases, military pay delay, Medicare payment delay, and advance of final revenue-sharing payment.

Implementing the policies of the Congressional budget resolution would reduce the deficit by $37 billion in 1988, $52 billion in 1989, and $68 billion in 1990 compared with the CBO baseline (see Summary Table 3). About one-half of the deficit reduction is to come from tax increases. Another 20 percent would result from holding the growth in defense spending below the rate of inflation. Defense outlays would be $2 billion below the baseline in 1988, $12 billion lower in 1989, and $19 billion lower in 1990. The resolution allows even less defense spending if the assumed tax increases are not signed into law.

Of the 1988 savings, $5 billion would result from allowing rural electric cooperatives to prepay to the Treasury without penalty loans that were made to them at the higher interest rates prevailing in the early 1980s. While the transaction would cost the federal government money over the long run, the loan prepayments are treated as reducing the deficit in the year in which the Treasury receives them.

Summary Figure 1.

Deficit Adjusted for Tax Reform Act and One-Time Savings



SOURCE: Congressional Budget Office.

ECONOMIC PROJECTIONS

The major differences between the revised economic projections and those in CBO's winter report are higher inflation for 1987 and 1988 and higher interest rates and lower economic growth over the 1987-1992 period. Consumer price inflation is higher for two reasons: oil prices rebounded sharply on world markets during the first half of the year, and the dollar fell precipitously against the currencies of most of the major U.S. trading partners. In response to threatened inflation and some tightening by the Federal Reserve, both long- and short-term interest rates ratcheted upward. By mid-year, interest rates on 10-year Treasury bonds had increased more than a percentage point; rates on short-term bills also rose, but to a lesser extent.

SUMMARY TABLE 2. CHANGES IN BASELINE DEFICIT PROJECTIONS SINCE FEBRUARY (By fiscal year, in billions of dollars)

	1987	1988	1989	1990	1991	1992
Winter Baseline	176	171	164	137	110	84
Changes						
Enacted legislation	3	2	2	2	2	2
Economic reestimates	6	23	35	49	64	77
Technical reestimates	-28	-16	-13	-16	-15	-16
Thrift Fund accounting	1	3	3	3	3	3
Total	-18	12	27	39	55	67
Summer Baseline	157	183	192	176	165	151

SOURCE: Congressional Budget Office.

The Forecast for 1987 and 1988

Further escalation in inflation is not anticipated. Some increase was bound to occur from the temporarily low inflation rate in 1986; energy and farm commodity prices could not continue falling forever. Barring an interruption of Persian Gulf oil, however, oil supplies appear fundamentally to be adequate. The CBO forecast therefore assumes only a gradual increase in

SUMMARY TABLE 3. POLICY CHANGES IN THE FISCAL YEAR 1988 BUDGET RESOLUTION AS ESTIMATED BY CBO (By fiscal year, in billions of dollars)

	1988	1989	1990
CBO Baseline Deficit	183	192	176
Policy Changes			
Revenue increases a/	-21	-25	-26
National defense	-2	-12	-19
Nondefense discretionary spending	-4	-6	-8
Entitlements	-3	-5	-7
Offsetting receipts	-1	b/	1
Rural Electrification Administration prepayments	-5	1	1
Debt service savings	-1	-5	-9
Total	-37	-52	-68
Budget Resolution Deficit as Estimated by CBO	146	140	108

SOURCE: Congressional Budget Office.

a. Revenue increases appear as negative numbers because they reduce the deficit.

b. Less than $500 million.

the price of imported oil from about $18.00 per barrel in mid-1987 to about $20.00 per barrel by the end of 1988. Food prices are assumed to rise by about 4½ percent in both 1987 and 1988. In view of the continuing rapid build-up of U.S. debt to foreigners, CBO and most private forecasters expect that downward pressure on the dollar will continue. The forecast assumes that the exchange rate will be about 5 percent lower at the end of 1988 than it is now. All these factors will continue to raise the cost of imported goods and other consumer purchases through the end of 1988. Because of the current amount of slack in the economy, however, they should not touch off a price-wage explosion, such as happened in the 1970s.

The Federal Reserve will nonetheless continue to be concerned that these temporary price increases not become the basis for a renewed inflationary spiral. As a result, the Federal Reserve will try to prevent further sharp depreciations of the dollar and maintain the differential between interest rates in the United States and interest rates abroad. Reflecting a more inflationary environment and a more stringent policy stance by the Federal Reserve, the CBO forecast shows interest rates to be somewhat higher than previously forecast, particularly in 1988.

The short-run forecast for 1987 and 1988 is shown in Summary Table 4. The forecast assumes that the Congressional budget resolution will be fully implemented and that therefore the federal deficit will shrink. Real GNP is expected to grow moderately--by 3.1 percent in 1987 and 2.6 percent in 1988 (fourth quarter to fourth quarter). The growth forecast for 1987 is virtually unchanged from the winter, but the figure for 1988 has been lowered slightly in view of the worsened outlook for inflation and interest rates. The higher inflation will slow the growth in real disposable personal income and consumption, while higher interest rates will dampen investment, especially in residential construction. With domestic demand sluggish, an improvement in the trade balance--fueled by the continuing decline in the dollar--must provide the major impetus to growth.

Economic Projections for 1989-1992

The medium-term economic projections are presented in Summary Figure 2 and Summary Table 5. Beyond 1988 these economic assumptions are projections rather than forecasts in that they are based on historical trends. They are simply used to show the budgetary outlook under this average historical experience.

Real GNP is assumed to grow at an average annual rate of about 2.7 percent during the 1989-1992 period--slightly lower than previously projected. The civilian unemployment rate edges down from 6.1 percent in 1988 to 5.7 percent in 1992. Inflation eases somewhat after 1988. The rate of increase in the CPI-W falls by almost a percentage point by 1992. Reflecting the unwinding of inflation, interest rates also drop. By the end of the period, the three-month Treasury bill rate averages 5.7 percent, and the 10-year government bond rate 6.8 percent.

Uncertainties in the Forecast

A number of factors make the forecast uncertain. In the short term, the future paths of consumption, net exports, import prices, and inflation are particularly difficult to predict. In the long run, interest rates and produc-

SUMMARY TABLE 4. THE CBO FORECAST FOR 1987 AND 1988

	Actual		Forecast	
	1985	1986	1987	1988
Fourth Quarter to Fourth Quarter (percent change)				
Nominal GNP	6.6	4.5	7.2	6.8
Real GNP	3.3	2.2	3.1	2.6
Implicit GNP Deflator	3.2	2.2	4.0	4.2
CPI-W a/	3.3	0.9	5.1	5.2
Calendar-Year Averages (percent)				
Unemployment Rate	7.2	7.0	6.3	6.1
Three-Month Treasury Bill Rate	7.5	6.0	5.9	6.6
Ten-Year Government Bond Rate	10.6	7.7	8.1	8.5

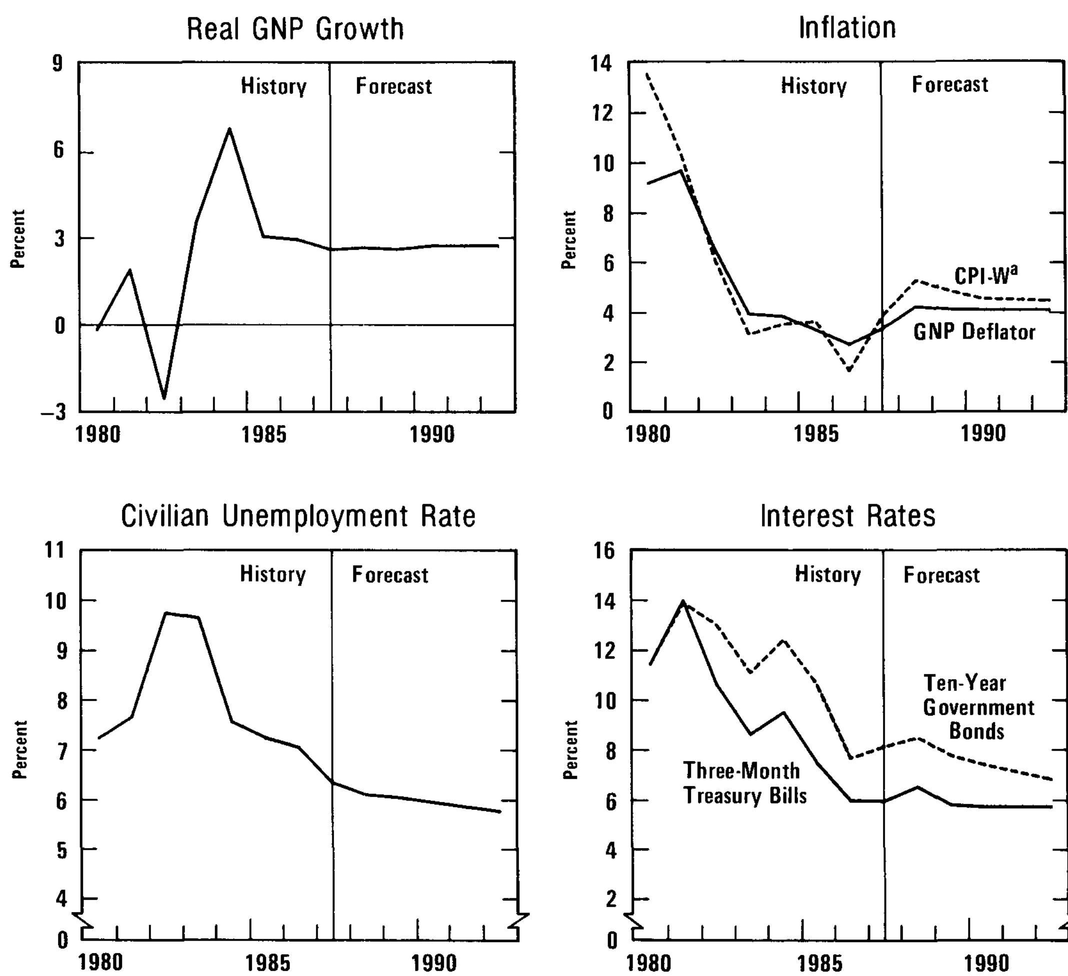
SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

a. Consumer Price Index for urban wage earners and clerical workers.

tivity are particularly important; minor variations in either variable can change the budget projections significantly.

These and other uncertainties imply that actual budget deficits typically will differ from the forecasts. Indeed, over the 1980s actual deficits have been significantly larger than those forecast at the time of the first Congressional budget resolution--in part because of policy changes, in part because of estimation biases and uncertainties. The last chapter of this report provides a special analysis of these errors.

Summary Figure 2.
Major Economic Assumptions



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

[a]Consumer Price Index for all urban wage and clerical workers.

SUMMARY TABLE 5. COMPARISON OF CBO WINTER AND SUMMER ECONOMIC PROJECTIONS (By calendar year)

	Actual	Forecast		Projected			
	1986	1987	1988	1989	1990	1991	1992
Nominal GNP Growth (percent change)							
Summer	5.6	5.9	6.9	6.7	6.8	6.8	6.8
Winter	5.4	6.0	6.9	7.2	7.4	7.0	6.8
Implicit GNP Deflator (percent change)							
Summer	2.6	3.3	4.1	4.0	4.0	4.0	4.0
Winter	2.8	3.2	3.8	4.1	4.2	4.2	4.2
Real GNP Growth (percent change)							
Summer	2.9	2.6	2.7	2.6	2.7	2.7	2.7
Winter	2.6	2.8	3.0	3.0	3.1	2.7	2.5
CPI-W (percent change) a/							
Summer	1.6	3.8	5.2	4.8	4.4	4.4	4.4
Winter	1.6	3.5	4.3	4.3	4.3	4.3	4.3
Unemployment Rate (percent)							
Summer	7.0	6.3	6.1	6.0	5.9	5.8	5.7
Winter	7.0	6.6	6.5	6.3	6.1	6.0	6.0
Three-Month Treasury Bill Rate (percent)							
Summer	6.0	5.9	6.6	5.8	5.7	5.7	5.7
Winter	6.0	5.6	5.7	5.6	5.5	5.3	5.2
Ten-Year Government Bond Rate (percent)							
Summer	7.7	8.1	8.5	7.8	7.4	7.1	6.8
Winter	7.7	7.2	7.2	6.6	6.2	5.9	5.6

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

a. Consumer Price Index for urban wage earners and clerical workers.

CHAPTER I

THE ECONOMIC OUTLOOK

The pace of economic activity picked up in the first half of 1987, but it is unlikely that this rate of growth will continue in the near term. Output and employment grew at a faster rate than in 1986, and the unemployment rate decreased substantially, falling to its lowest level since 1979. Though the real foreign trade balance has improved, and should continue to be a strong source of growth, most other components of demand are weakening. In contrast to last year, when falling interest rates and inflation were stimulating the economy at the same time as the growing trade deficit was restraining growth, interest rates and inflation are now likely to be dampening factors while the improvement in net exports is likely to be the strongest source of growth. In addition, the continued effort to reduce the federal budget deficit will tend to restrain growth in government outlays.

Only moderate growth and almost no change in the unemployment rate are forecast for the next 18 months. Inflation as measured by the Consumer Price Index (CPI) is expected to increase from its low 1986 rate, because of the increase in petroleum prices and an acceleration in import prices.

The midsummer outlook differs from that in the January report in forecasting higher inflation and interest rates in the near term, and slightly lower real economic growth throughout the 1988-1992 period. The primary reasons for the upward revision in consumer price inflation are the fall in the dollar early this year, which was larger than anticipated, and the recent increase in oil prices. The revision in interest rates largely reflects the increase that has already taken place. Some additional upward revision results from higher current and expected inflation and from the Federal Reserve Board's announced intention to counter further sharp declines in the dollar.

The reduction in the real GNP growth forecast for 1988 reflects higher interest rates and the adverse effect of higher inflation on household real incomes. The marginal reduction in the growth assumptions after 1988 arises from a reappraisal of the long-run growth prospects of the economy.